



PROMOTION TESTS, 1938
GRADE VIII

GENERAL SCIENCE AND HEALTH EDUCATION

Time—2½ hours.

Note: Candidates shall write on the section studied during the year.

SECTION A—GENERAL SCIENCE

Values

- 7 **1.** (a) Water may be found in three forms in nature.
What are these forms? Tell how you would demonstrate by experiment the truth of this statement.
- 3 (b) State:
- (1) the boiling point of water.
 (2) the freezing point.
 (3) the point of greatest density of water under normal pressure.
- 1 **2.** (a) For what purpose is water filtered?
- 2 (b) State the necessary things required to perform an experiment on filtering water.
- 3 (c) Tell how you would carry out the experiment and illustrate by diagram.
- 2 (d) What observations would you make as the experiment progresses?
- 2 (e) Tell how nature provides for the filtration of water.
- 10 **3.** Using diagrams, account for the action in any *two* of the following: siphon, bicycle pump, parachute, fountain pen.
- 4.** You wish to compare the air near the floor with the air some distance above the floor.
- 2 (a) How can you get a test tube full of air from near the floor?
- 2 (b) What would you use to test the air for carbon dioxide?
- 4 (c) In testing the air near the floor and the air some distance above the floor, what observations would be made?
- 2 (d) From this experiment what are your conclusions?

- 10 **5.** Using a diagram, explain how a gravity water system might work for a small house.
- 10 **6.** Choose *one* of the following and tell the steps that you would follow in observing the life history: grasshopper, cabbage white butterfly, frog.
- 10 **7.** Write the letters from (a) to (j) in a column and opposite each write the proper word for each corresponding blank.
- (a) The level reached by underground water is called the
 - (b) Water in which lime and other materials have been dissolved is called
 - (c) Water in a deep well is less likely to contain impurities than water in a shallow well because it has been
 - (d) The layer of soil through which water cannot penetrate is called the layer.
 - (e) A well in which water rises to the surface under natural pressure is called an well.
 - (f) Water which is left standing in the air disappears. This process is called
 - (g) Water, which has become flat and tasteless by standing for a long time, may be improved in taste by a process called
 - (h) In many industries liquids are heated to boiling temperatures and then the resulting vapour is cooled. This process is called
 - (i) An instrument used for measuring atmospheric pressure is called a
 - (j) The normal body temperature of man is approximately

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- 10 **8.** Write down letters from (a) to (e) in a column and opposite each write the word to indicate the answer.
- (a) One of the discoverers of insulin was (1) Pasteur (2) Madame Curie (3) DeKruif (4) Banting.
 - (b) A person who is repeatedly exposed to a disease and does not contract it, is said to be (1) antiseptic (2) toxic (3) immune (4) healthy.

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- (c) The discovery of vaccination was made by (1) Dr. Jos. Lister (2) Leewwenhoek (3) Dr. Edward Jenner (4) Edward L. Trudeau.
- (d) When disease germs get into the human body they make (1) antitoxins (2) antiseptics (3) glandular secretions (4) toxins, which may cause us to be ill.
- (e) Hospital deaths after surgical operations were reduced in number because of the work of (1) Dr. Edward Jenner (2) Walter Reed (3) Dr. Jos. Lister (4) William Harvey who took precautions to prevent infection of the wound.
- 10 **9.** { Make a brief comparison of present methods
 Either { dealing with some disease, and methods used
 { in the past among North American Indians,
 { or the Eskimos.
- { What purposes should we expect foods to serve?
 Or { Answer by considering the food values of:
 { candy, alcohol, soft drinks, potatoes.
- 10 **10.** { Write brief notes on any *two* of the following:
- Either* { (a) The origin of quarantine.
 { (b) Reasons for the disappearance of communi-
 { cable diseases.
 { (c) Health is being commercialized.
 { (d) Improved health conditions in factories.
- Or* { Tell of the work of Pasteur and how it has helped
 { health conditions.

GENERAL SCIENCE—SECTION B

- 10 **1.** Explain briefly any *ten* of the following terms:
 earth's crust, igneous rock, erosion, sedimentary
 rock, stalactites, loam soil, tillage, subsoil, alka-
 line, alluvial soil, residual soil, capillarity.
- 10 **2.** { Do you believe the centre of the earth to be solid
 Either { or do you believe it to be liquid? Advance ar-
 { guments in support of your belief.
- { Describe any experiment to demonstrate the
 Or { moisture holding capacity of soils. State your
 { conclusions.
- 10 **3.** Compare carefully the types of plants found in
 rain-forest regions with those found in desert
 regions, keeping in mind the adaptation of the
 plant to its environment.

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- 10 4. (a) State clearly the means of propagation referring to any two of the following: strawberry, red raspberry, tulips, rhubarb, poplar.
- (b) Using a diagram, explain how you would construct a good vegetable bin for winter storage.
- 10 5. Does an eclipse of the sun take place when the moon is "full" or when the moon is "new"? Using diagrams, give reasons for your answer.
- 5 6. { (a) What steps should be taken in preparation for the setting out of a shelter belt?
- 5 *Either* { (b) State carefully the steps you would take to transplant a young tree, explaining carefully what precautions should be used.
- 5 { (a) What steps should be taken in preparation for the setting out of shrubbery about the home?
- 5 *Or* { (b) In what other ways can you improve the appearance of the grounds around the home?
- 10 7. Write the letters from (a) to (j) in a column and opposite each write the proper word for each corresponding blank.
- (a) The weight of a substance is caused by a force called
- (b) The centre of our solar system is the
- (c) When the water on the sea-coast is going down, the tide is said to be
- (d) The earth completes its orbit in days.
- (e) An instrument which makes an object appear closer to us is called a
- (f) When the northern point of the earth's axis is inclined farthest away from the sun, it is the season in Canada.
- (g) The time when darkness and daylight are approximately equal is called the period of the
- (h) If every star is a sun then our sun might properly be called the nearest
- (i) Green leaves absorb carbon dioxide from the air and with the aid of change it to sugar.
- (j) Extremes of heat and cold such as exist on the moon are prevented at the earth's surface by the

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- 1 **8.** What should a weight chart, systematically kept, show?
- 2 **9.** How would you conduct a straight line test for posture?
- 3 **10.** Name *three* symptoms of eye strain.
- 2 **11.** Name *two* signs that warn you that you should visit your dentist.
- 1 **12.** Why should we always inhale through the nose?
- 2 **13.** Name *two* signs of bad tonsils.
- 2 **14.** Name *two* uses of the skin to the body.
- 1 **15.** What organs are adversely affected by smoking?
- 2 **16.** Name *two* exercises to strengthen the arch of the foot.
- 1 **17.** How is the food distributed to the cells?
- 1 **18.** How does pasteurization of milk help to make it safe?
- 2 **19.** What vital organs are given a better chance to work by good posture?
- 1 **20.** What may be the result of blowing the nose too hard?
- 1 **21.** What protection has nature given the eyes?
- 1 **22.** What food value is there in lettuce?
- 1 **23.** What food provides the body with calcium?
- 1 **24.** Why are the bones of the body not solid?
- 1 **25.** Why should a person not drive a car while under the influence of alcohol?
- 3 **26.** Name *three* things upon which the well-being of the nervous system depends.
- 1 **27.** Why is frequent bathing desirable?



